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ABSTRACT

Microcatalog use studies at the University of Oregon have demonstrated that users encounter access difficulties when confronted with a multiple file microfiche catalog. This research verifies theories by Mooers, Zipf, and others that the public minimizes search efforts and implies that closed catalogs with supplements such as add-on catalogs will not be fully understood or utilized. A comparison of U. of O. survey results with those of other more positive microcatalog studies reveals that the problems created are not inherent to any given catalog format but are created by multiple lookups. Retrospective conversion studies and the costs of converting bibliographic records into machine readable form are considered. (Author/RAA)

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THE EFFECT OF CLOSED CATALOGS ON PUBLIC ACCESS

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ABSTRACT

THE EFFECT OF CLOSED CATALOGS ON PUBLIC ACCESS

Microcatalog use studies conducted at the University of Oregon have demonstrated that users encounter difficulties using multiple-file microfiche catalogs. This research verifies theories by Mooers and others which suggest that closed catalogs with supplements will not be fully understood or utilized by the public. U of O survey results are compared to other studies which indicate that the problem is not one of catalog format chosen but of multiple-lookups. Retrospective conversion strategies and the costs of converting records into machine-readable form are considered.

THE EFFECT OF CLOSED CATALOGS ON PUBLIC ACCESS:
HUNTING AND FICHEING IN AMERICA'S BIBLIOGRAPHIC WATERSHEDS

The past few years have seen some potentially revolutionary changes in approaches to bibliographic access. In an era of tight funds, lack of space, changing catalog codes and subject headings, and uncertainty about the future, many research libraries are planning to follow LC's lead and close existing catalogs. To some, the card catalog is an unwiedly white elephant whose passage will not be mourned. To others the prospect is more traumatic.

Some libraries, such as the Milton Eisenhower Library at Johns Hopkins University and Ohio State University, are opting for on-line systems. Elsewhere there is interest in microform catalogs, either as an interim step toward going on-line or as the "permanent" catalog form. Catalogs derived from computerized data bases offer personnel cost, distribution, and flexibility advantages over card catalogs, and by taking advantage of these capabilities we may make card catalog closure the first step toward truly making our collections available to the public.

In the foreseeable future it seems safe to assume that many libraries will maintain both a frozen card or filmed catalog and Computer Output Microfiche (COM) supplements, preferably for only a limited period of time. Four years ago the University of Oregon headed this direction by filming the existing card catalog. Since then all new bibliographic records have been entered into the Blackwell North America (BNA) data base. BNA sends us card sets as well as COM supplements to the filmed basic catalog.

In September, 1976, microcatalog viewing stations were provided at seven locations in the main and branch libraries. Since then the card catalog in the Architecture and Allied Arts branch has been replaced by microfiche and the subject catalog closed.

How would readers react to the new system? A literature search revealed that much research had been done on economic aspects of microcatalogs but relatively little on the interface between the microcatalog and the library user. McElderry has noted that "Little attention has been given directly to a systematic appraisal of user requirements."[1]

Such an appraisal seemed to be in order at the University of Oregon and a user survey was conducted in 1976 and 1977. The responses of 800 participants were analyzed via an SPSS crosstabs program. A full account of this survey including the literature search, methodology, and detailed results was published in a previous report.[2] The purpose of this follow-up article is to summarize the major findings, report 1979 survey results, discuss the implications of this research, and suggest some strategies for improving future catalogs and other library access systems.

First, it is important to consider the physical nature of microforms. We know from previous research that such environmental factors as overcrowding, lack of writing space, poor illumination, and inadequete indexing of fiche have a negative impact on public acceptance.[3-6] Eyestrain, nausea, headaches, and pains in various parts of the anatomy were encountered by nearly one-fifth of those participating in the U of O survey. Although such a negative response is at least partially a reflection on the sometimes fuzzy filmed pre-1975 section of the

microcatalog, it would be overoptomistic to assume that even a relatively perfect system would not create some difficulties for some catalog users.

Microcatalogs, however, involve a tradeoff between this nuisance factor and the convenience of having the catalog available in a variety of locations around the library, the campus, and the nation. The nuisance factor can be reduced by careful palnning; standardized fiche, fiche-placement, and viewers, advanced testing of the system, advanced training of staff, and an adequete number of well lit, roomy viewing stations all contribute to success. Problems involved with selecting the proper fiche, loading it in the reader, and refiling can be circumvented if the library is prepared to purchase mechanized rollfilm viewers in place of fiche systems.

SURVEY RESULTS

The University of Oregon microfiche catalog consists of two major sections comprising three separate files; the filmed basic catalog and two COM supplements. Although the supplements are uniformly clear and legible, the same claim cannot be made for the filmed retrospective file.

[Insert Table 1]

Between 1976 and 1977 disatisfaction with the basic file increased sharply; the percentage of those considering it highly legible dropped from thirty-five to fifteen percent as unfavorable responses rose from fourteen to thirty-six percent. In a 1974 survey of one hundred users in the Architecture and Allied Arts Branch (A&AA) where the card catalog has been totally supplanted by microfiche the unfavorable response skyrocketed to sixty-three percent. Familiarity with the filmed catalog has bred considerable contempt and had a negative impact on public acceptance of the microcatalog as a whole.

Besides the legibility factor, there is a second reason to avoid filmed catalogs; unlike card files which allow the removal of superseded and inaccurate records, a filmed catalog is truly "frozen" and a greater source of misinformation and confusion over time. It would be prudent for libraries to retain their old card catalogs after closure, rather than filming and discarding them, until a totally machine-readable catalog is realized. At the University of Oregon we are planning not only to retain our card catalog but to keep the title section open even after the author section is closed.

[Insert Table 2]

Although legibility was not a serious problem with the COM supplements, nonuse was. Nearly twice as many respondents gave high marks to the supplement than they did to the basic catalog, and only a quarter as many considered the supplements "poor", but more than a third of the sample never used the supplements, relying exclusively on the flawed retrospective section. This verifies a University of Toronto study in which only eight percent of the students were frequent supplement users while forty percent never used them at all.[7]

Considering that the filmed section of the microcatalog is now four years out of date, complete nonuse of the supplements by a third of the public and only occasional use by another half is rather alarming. Reliance on a frozen catalog can lead to decreased satisfaction with the library because (1) apparantly the library has no current materials, (2) recataloged or reclassified materials can be "lost" under the old call number, or (3) new forms of entries or subject headings cannot be

found in the frozen file. As Hickey has observed "One of the unfortunate facts of library life is the user's tendency to walk away from the catalog when it appears not to have performed well--no complaints, no objections, just an acceptance of defeat."[8]

A RETROSPECTIVE ON INFORMATION SEEKING AND A PLEA FOR RETROSPECTIVE CONVERSION

Three theories should be considered if we wish to produce catalogs which can be easily used by the public; the "Principle of least effort,"[9] "Mooers' law,"[10] and the "Principle of information processing parsimony"[11], also known as "Ziph's law."

In a library "More than fifty percent...will look up only one entry and then stop--REGARDLESS of whether or not they have found what they are looking for."[12] This is an example of the "principle of least effort" at work. Ideally, we might like to think of supplements as additional access points, but in practice multiple files are rarely consulted and the existence of a complex (COMplex?) system may confuse and discourage users. This brings us to Mooers' law which posits that "An information retreieval system will tend not to be used whenever it is more painful and troublesome for a customer to have information than for him not to have it."

Mooers would not be surprised to read the following comments elicited during the U of O survey: "Too many places to look which is frustrating and time consuming" or "The fiche is one of the few work saving devices I've used. After using it once it cures you of all desire to use it again, thus decreasing the amount of work you do."

Ziph's law maintains that people not only minimize search efforts,

but neither need nor want all the information available on a given subject. Therefore they cannot be expected to check supplements if they get a few citations from the basic file even if those citations are less current, specific, or relevant than what they might encounter in a more exhaustive search.

Seymore Lubetsky has noted a flaw in closed catalogs and multiple file systems which present difficulties for even the most conscientious searcher: the syndetic and collocation functions of the catalog are destroyed by split files thus causing the catalog to "fail its purpose."[13]

Considering how people approach information and the value of the syndetic structure of the catalog, it is hard not to consider frozen or closed catalogs which do not accurately reflect current library holdings a form of professional irresponsibility. Hewitt and Gleim recommend "a gradual supplanting of the card catalog by COM...In order to avoid a fragmented combination of old card catalog, add-on catalog, and COM catalog, it would be preferable to maintain a single card catalog after 1981."[14]

Librarians who do close their catalogs are advised to do everything possible to call attention to the new catalog and encourage patrons to begin their searches there. This is especially true if the new catalog is in a different form, such as COM. At the University of Oregon we are relabeling the basic catalog and the supplements. The filmed basic catalog will become the "Old Catalog" and the supplements will be the "New Catalog" and the "Newest Catalog" in the hope that this will increase supplement use. Librarians planning to film and then

discard their card catalogs are advised that such a practice is more likely to contribute to their problems than is to solve them.

Vervliet has observed the problems inherent to multiple files and believes that "There is no solution to the problem of closing the old catalogue unless a library is prepared to convert it into machine readable form or to continue to produce cards and file them manually."[15] Given such a dilemma, librarians should consider microcatalogs to be a viable option only if they might reasonably expect to eventually enter all bibliographic records into a single data base from which a single, fully manipulatable, up to date catalog can be generated in a variety of forms; fiche, film, book, or on-line. [Insert table 3]

Perhaps the most important finding of the University of Oregon survey is that frozen multiple file catalogs exacerbate existing access problems. Less than a quarter of those surveyed reported that the microcatalog was easier to use than the card catalog, twentynine percent considered the two forms comparable, and nearly half reported that the fiche catalog was harder to use.

Meanwhile, studies at the University of Toronto[16], Brighton Polytechnic[17], Amigos[18], Los Angeles County Public Library[19], Western Kentucky University[20], and the New York State Library[21] report widespread acceptance of microcatalogs. It is important to note that these institutions have incorporated retrospective records into their data bases, thus reducing or eliminating the multiple-file problem. At Los Angeles County Public Library where all records are available in a single file loaded into mechanized ROM viewers three quarters of the respondents reported that they favored the

new system and catalog use has gone up sharply. (Repeat: catalog use, hopefully leading to enhanced library use and support, has gone up sharply.) The problem is clearly not one of the medium chosen (card, film, fiche, or on-line) but of multiple files. As Friedman has warned "The headlong rush to close the catalog...must be tempered by a concern for library users who will be ravaged by the multiple lookups forced on them by cost-but not service-oriented administrators."[22]

NETWORKING: RELIEF FOR SPLITTING HEADACHES

What has happened at libraries which have attempted to close or split their catalogs in the past? At the University of Nebraska-Lincoln the card catalog was split in 1965 with the old Dewey books in one sequence and the new LC books in another. Swanson reports that "...it was a miserable failure, and the best evidence for the fact is the librarians' reference to the catalog and reference areas as 'the combat zone'...I can personally attest to clenched patron fists and at least one sheet of citations being thrown at me after I communicated the dimensions of catalog searching to patrons. Further evidence is the legislature's willingness to fund a special project to integrate the divided catalogs."[23] Sounds a little like Hunter S. Thompson on Fear and Loathing in the Library, doesn't it?

Reports from the National Library of Medicine, University of Toronto, New York State Library, Glasgow University, the Scottish National Library, and elsewhere, while less dramatic, indicate that catalog closures result in substantial dissatisfaction, lower rates of catalog use and success, unexpected expenses, and an increase in the amount of public service time

spent explaining the catalogs. From the standpoint of public relations and support, let alone our professional responsibility to make our resources as accessible as possible, it is essential that closed catalogs be considered a transitional phase at best, a mere stumbling step between the inflexible card and book catalogs of the past and the client oriented online systems of the very near future.

In order for libraries to take full advantage of multiplanar records, broader searching options, automated authority control, and the other capabilities of automated systems, it is essential that retrospective conversion of catalog records not now in machine-readable form be given the highest priority. Batch-mode processing of retrospective records is cheaper than the creation of original cataloging, conceptually simple, and well described in the March-April 1978 Library Technology Reports.[24]

Research libraries with collections of over three-quarter million titles face two problems that cause some to balk at the idea of a massive retrospective conversion effort; the sheer size of the collection and a lower percentage of data base matches than might be achieved in a smaller library. Additionally, a defeatist attitude by administrators is another impediment to such projects, projects that can be more easily accomplished if we are willing to work cooperatively on them.

Major retrospective conversion projects have already taken place on the national level; the British National Bibliography, CONSER, and RECON, for example. LC MARC tapes have been produced for over a decade and are a rich data source, central to virtually and major cataloging effort, current or retrospective.

Ohio State University, one of the largest libraries in the US with 3.4 million volumes is well on the way to a fully automated catalog. They have a partial catalog online now and are loading retrospective records.

Likewise, the New York State Library has a fully automated system, having converted 650,000 records in ten months at the cost of only .47/record, this during the New York State Fiscal Crisis. Peter Paulson, director of NYSL, reports that the converstion effort is paying for itself in terms of efficient bibliographic, reference, and inter-library loan searching. An additional payoff is better service and a catalog available throughout the state. By making an investment now we can hope to save money later.

Following the lead of the University of Toronto and with the full support of their non-militaristic federal and provincial governments, the British Columbia Union Catalog (BCUC) is now being created. Twenty-four member libraries including the University of British Columbia, Simon Fraser University, and the University of Victoria are creating machine readable records for over three million titles over a five year period.

OCLC has a gigantic data base; 4.5 million records, three quarters of which are contributed copy not available on MARC tapes. The Washington Library Network (WLN) contains over 200,000 unique contributed copy records and an automated name authority system which is second to none. RLIN, the Research Library Information Network, has over a

million contributed records and many more will be created if they adopt a proposed plan which would divide responsibility for conversion to member libraries according to subject areas. All these networks have policies and pricing structures that encourage retrospective conversion of records and, in a most salutory development, WLN and RLIN have agreed to cooperative name-authority and data base sharing.[25]

A nationwide bibliographic data base is in the planning stage at this time. According to a report of the Network Advisory Committee "The pros and cons of including retrospective bibliographic records... are being analyzed."[26] An RLIN report has noted that "First and most important is the need for a national network...to enhance the scholar's ability to locate information."[27] Many scholars are concerned with both current and historical documents, and if the main goal of the Committee is to serve them efficiently, then retrospective conversion is absolutely essential. Those concerned that we create the best, most complete, easiest to use catalogs possible in the public interst are urged to contact their network or Henriette Avram, Director of the Network Devolopment Office at the Library of Congress. This may be the best opportunity we will have to deal with this truly national problem on a national level rather than in a piecemeal fashion.

But what if the National Network never comes into being and your library is not a member of an existing network? Try a vendor or other type of bibliographic utility. As an example of what's available in the private sector, BNA has well over two million records in their

data base, a quarter of which are contributed copy. Batch mode conversion projects are possible for special low rates, and as more records are added to the system hit rates go up and prices go down. Retrospective conversion is not some remote goal; the expertise and technology are available from a variety of sources.

Suppose that a library runs its shelf list against a data base and encounters a 75 percent hit rate. After accepting those records it can do one of two things, key all remaining records into the data base immediately or convert them over time. Clearly, the firs course is the most desirable, but suppose current funding doesn't a. for such a major one-shot project. What should be converted first?

Gorman has sagely noted that one should not just start with the letter A.[28] One could argue that reference materials and serials should go first. Thanks to MARC, CONSER, and other projects, the vast majority of such items already have machine-readable cataloging available. One thus begins with a relatively small project with two big payoffs: all these heavily used materials will be in the current main catalog and separate serials and reference catalogs can be generated as well.

Other items may be input on the fly as they return from circulation. Thus heavily used materials will select themselves for retrospective conversion. When new works of established authors or new editions are cataloged, the entire file for that author or title may also be fed into the system at that time, thus maintaining the collocation function of the catalog. Until all records are in the data base, however, library staff and users must search at least two catalogs, a current COM or

online catalog and an atrophying, closed card catalog.

There is no use in pretending that full retrospective converison will be quick, simple, and cheap, although it may be less costly than the naysayers would have us believe. The quick survey, just presented, reveals that we are moving in the right direction, although perhaps not quite fast enough.

Conversion may be costly, but it can be argued that the cummulative costs of not converting are actually far greater. First consider the cost of maintaining even a frozen catalog while simultaneously paying for the automated model. Although it appears that we are getting out of the maintenance business with the universal fix, the computer can't fix the card files. Consider the cost of order searching, verification, and other types of searching in both manual and automated files; the hugh waste of staff time on staffs which may be shrinking while the demands placed on their time are growing. Does one change headings in the closed catalog as they are changed in the data base or allow grave inconsistencies to develop between them? Clearly, neither of these options is desirable. It's not only pound foolish not to convert, it's not even penny wise, only penny pinching.

The real costs of not converting will be borne by our already underserved public. We have the opportunity to provide them with access systems which are quicker and easier to use than card catalogs, provide more flexible search options, and are current and accurate. It's one thing to waste our own time and money on dual systems and closed catalogs, but what right do we have to foist our folly on them?

Have we forgotten Ranganathan's directive to save the time of the reader; or do we care?

While we await the next budget cut, the mass media and other information specialists are actively improving and promoting their services. Allowing our public position to erode by not bucking the downward spiral of less money-less service is an example of what Berman calls "libricide."[29] If we don't support the public how can we expect them to support us. It's not just idealism to provide easy access to our collections; it's enlightened self interst and in the public interest.

At this point it is essential for the library community to take a more active role in the political budget process and push for adequete funding on the local, state, and national level. Consider for a moment that the "error" in projecting the cost of using the Minuteman Missle in the proposed MX missle system was twelve billion dollars whild Federal aid to libraries in 1979 was a paltry two-tenths of a billion. Let's work together, quit quibbling over crumbs and go for a decent slice of the pie. Our best argument may be that by spending a little money now we can save a lot of money later and provide better service.

The proposition thirteen mentality is not necessarily one that simply demands tax cuts, but one that insists that citizens get a fair return on their tax dollar. Libraries which can demonstrate their value to the community generally receive public support in the form of successful levies, fund drives, etc. Although academic libraries serve campus communities primarily, as enrollments drop they might consider greater service to the general public, and can only hope to do this by making

libraries as easy to use as possible.

For theoretical, practical, and political reasons it is important that retrospective conversion leading to efficient catalogs be given a high priority by our libraries, networks, and government.

FOOTNOTES

1. Stanley Mc Elderry, "The use and economics of computer-generated microfiche catalogs," North Carolina libraries 33:31-3 (Winter, 1975).
2. James R. Dwyer, "Public response to an academic library microcatalog," Journal of academic librarianship 5:132-141 (July, 1979).
3. C.W. Christ, "Microfiche: a study of user attitudes and reading habits," JASIS 25:30-5 (Jan-Feb, 1972).
4. Donald Holmes, "Determiniation of the environmental conditions required in a library for the effective utilization of microforms," ED-046-403, (1970).
5. Ralph R. Lewis, "User's reaction to microfiche," College and research libraries 31:260-8 (July, 1970).
6. Arthur Tannenbaum and Eva Sidhom, "User environment and attitudes in an academic microform center," Library journal 101:2139-43 (Oct. 15, 1976).
7. Carole Weiss, "Card catalog to on-line catalog: the transitional process," (Unpublished report. University of Toronto Library, 1977).
8. Doralyn J. Hickey, "Theory of bibliographic control in libraries," Library Quarterly 47:253-273 (July, 1977).
9. Victor Rosenberg, "Factors affecting the preferences of industrial personnel for information gathering methods," Information storage and retrieval 3:119-27, (1967).
10. Calvin N. Mooers, "Mooers' law or, Why some retrieval systems are used and others are not," American documentation 11:203 (July, 1960).

11. George H. Haines, "Process models of consumer decision making," in Buyer/consumer information processing. Chapel Hill: University of North Carolina Press, c1974.

12. Paul E. Baldwin, "The B.C. Union Catalogue Project," Presented at the "After the card catalogue" workshop held at the British Columbia Institute of Technology, March 3, 1978.

13. Seymore Lubetsky, "Perspectives," Presented at the Conference on "Closing the Catalog" held in San Francisco, Februrary 14-16, 1979.

14. Joe A. Hewitt and David E. Gleim, "The case for not closing the catalog," American libraries 10:118-121 (March, 1979).

15. H.D.L. Vervliet, "Alternative forms of catalogues in large research libraries," International cataloging 6:7 (Jan.-March, 1977).

16. DeBruin, loc. cit.

17. Aldyth D. Scott, "Catalogue use survey," New library world 75:31 (Feb., 1974).

18. Carolyn M. Cox and Bonnie Juergens, Microform catalogs : a viable alternative for Texas libraries, Dallas : AMIGOS, (1977).

19. Brian Aveny and Mary Fischer Ghikas, "600 users meet the COM catalog," American libraries 10:82-83 (Feb., 1979).

20. Earl E. Wassom and Richard A. Jones, "Bibliographic access to full descriptive cataloging with COM," Journal of library automation 11:47-53 (March, 1978).

21. Peter Paulson, "Case history: New York State Library," Presented at the Conference on "Closing the Catalog" held in SanFrancisco, February 14-16, 1979.

22. Maurice J. Freedman, "The automation of the catalog-1976," Library trends 25:703-21 (Jan., 1977).

23. Ron Swanson, letter, April 2, 1979.

24. Brett Butler, Brian Aveny, and William Scholz, "The conversion of manual catalogs to coliection data bases," Library technology reports 14:109-206 (March-April, 1978).

25. "RLG and WLN announce joint plans," RTSD newsletter 4:9 (June, 1979).

26. Lenore S. Maruyama, "A report of the meeting of the Network Advisory Committee," Library of Congress Information Bulletin 38:73-76 (March 2, 1979).

27. Research Library Group, A plan for the development of the research libraries informtion network, rev. ed. Stanford, Calif. : The Group, (Jan. 4, 1979).

28. Michael Gorman, "The prospective catalog," Presented at the Conference on "Closing the Catalog" held in San Francisco, February 14-16, 1979.

29. Sanford Berman, "Living amid closed catalogs," Presented at the Conference on "Closing the Catalog" held in San Francisco, February 14-16, 1979.

TABLE 1

HOW WOULD YOU RATE THE LEGIBILITY OF THE BASIC CATALOG?

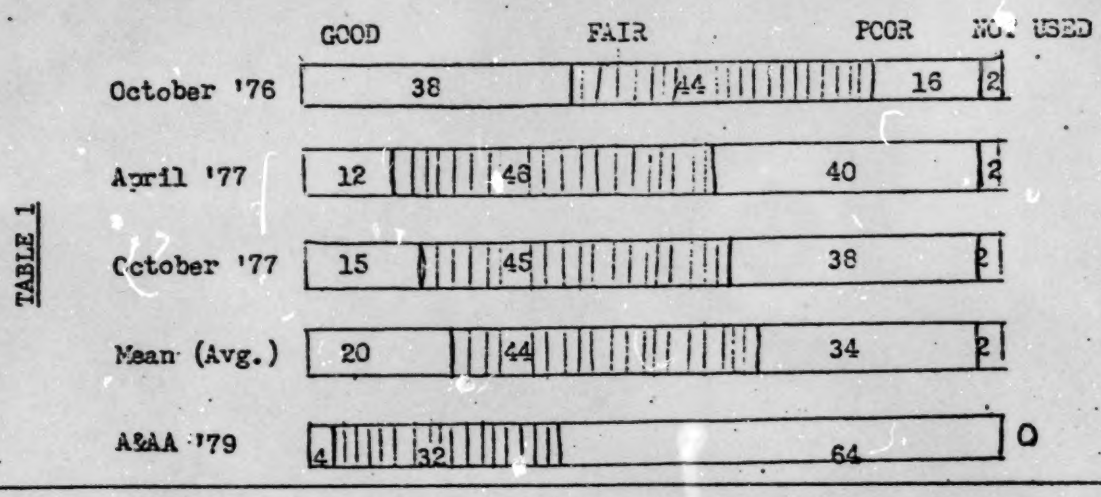

TABLE 2

HOW WOULD YOU RATE THE LEGIBILITY OF THE SUPPLEMENTS?

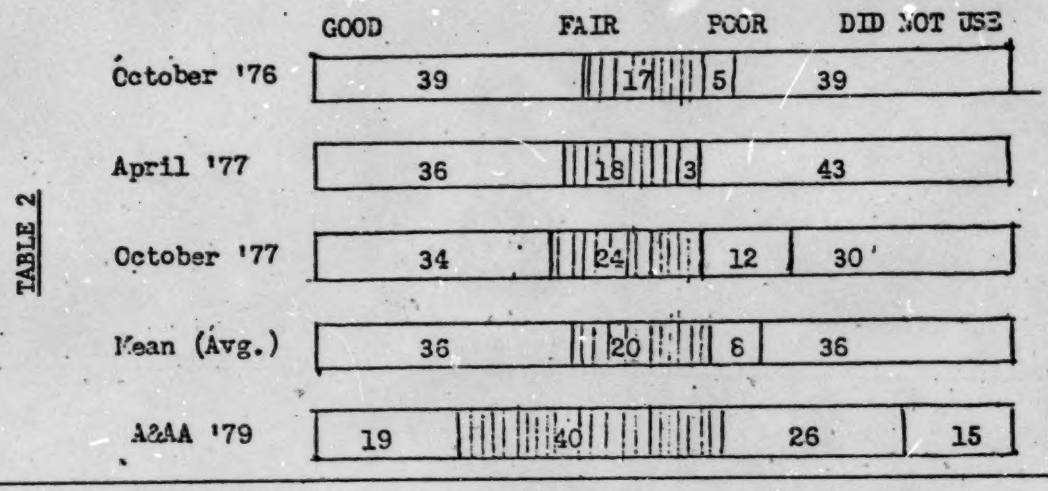

TABLE 3

IS THE MICROCATALOG EASIER TO USE THAN THE CARD CATALOG?